

# DYNAMIC INFORMATION STORAGE OR RETRIEVAL Classification 369/all - subclasses

Link to MPEP Section 904 - How to Search
Link to MPEP Section 719.05 - Search Recordation
Link to USPTO Rules of the Road (PDF DOC) when using Internet resources.

#### **General Search Guidance**

As general guidance, a complete search of the subject matter in this art area will include the following:

- A classified search of the original classification class and subclass for the subject matter and the other highly relevant art areas in the US patent documents
- 2. A text search of the US patent documents; patents, PG PUB, and OCR databases
  - o Broad text search for the general inventive concept(s), not limited by classification
  - Narrow text search for the specific claimed invention
  - Boolean text search employing the relevant inventive terms
- 3. A search of the foreign patent documents, JPO, EPO, and World patents by a text search appropriate for abstract databases
- 4. A NPL search of the highly relevant databases
  - Text search using care to distinguish between proper queries for full or abstract databases
  - Other special databases as designated, if any

Additional searching may be appropriate at the professional discretion of the searcher. This search is normally expected to be completed prior to the indication of allowable subject matter; but is not per se required where the claimed and disclosed subject matter may not be appropriate for search in one or more resources. Further, for any additional appropriate databases for searching, the searcher may consult with the Electronic Information Center (EIC) in the Technology Center.

# Field of Search

"When determining the field of search, three reference sources must be considered-domestic patent documents, foreign patent documents, and nonpatent literature (NPL). None of these sources can be eliminated from the search unless the examiner has and can justify a reasonable certainty that no references, more pertinent than those already identified, are likely to be found in the source(s) eliminated." (MPEP)

# **U. S. PATENT RESOURCES**

## **EAST/WEST**

<u>EAST</u> Coverage: 1971 - present, Full Text: 1971 - present <u>WEST</u> Coverage: 1971 - present, Full Text: 1971 - present

Full text patent and inventor searching.

All patent documents in a classification are viewed by USPC for relevance to the patent application being searched. Classification search is most productive where the subject matter relates to visible structural details of an optical pickup head, laser source, photodetector, optical component, or storage medium details, or has specific circuitry/flowchart configuration that is easily visually represented, such as an amplifier in a particular location in a tracking servo loop or a gain increasing step having particular relationship to another step or subroutine. A text search should be performed to supplement the classification search, where the broad concepts/environment are searched by text rather than by subclasses and then combined with the text search of the inventive concepts. Text searching is most productive where the subject matter relates to non-visual characteristics, such as particular values, materials, and terminology. Inclusive and intelligent use of truncation, synonyms, and proximity is vital. Classification search should be combined with a text search where the relevant subclasses have large numbers of patents and where classification search is most productive. The text search should include only such terms as are necessary to bring the number of patents down to a reasonable number for viewing. Classification search should be combined with text search where the broad concepts/environment are found in particular subclasses and the specific inventive concepts are not easily visually represented. These inventive concepts for example may relate to particular circuitry. laser source, photodetector, and optical component non-visual characteristics, particular storage

medium materials, particular terminology.

#### **BRS Search/USOCR Database**

<u>EAST</u> Coverage: 1920 - 1970, Full Text: 1920 - 1970 <u>WEST</u> Coverage: 1920 - 1970, Full Text: 1920 - 1970

Full text of U.S. patent grants.

All patent documents in a classification are viewed by USPC for relevance to the patent application being searched.

#### **PGPUBS**

EAST Coverage: 2001 - present, Full Text: 2001 - present WEST Coverage: 2001 - present, Full Text: 2001 - present

U.S. published applications.

All patent documents in a classification are viewed by USPC for relevance to the patent application being searched. Classification search is most productive where the subject matter relates to visible structural details of an optical pickup head, laser source, photodetector, optical component, or storage medium details, or has specific circuitry/flowchart configuration that is easily visually represented, such as an amplifier in a particular location in a tracking servo loop or a gain increasing step having particular relationship to another step or subroutine. A text search should be performed to supplement the classification search, where the broad concepts/environment are searched by text rather than by subclasses and then combined with the text search of the inventive concepts. Text searching is most productive where the subject matter relates to non-visual characteristics, such as particular values, materials, and terminology. Inclusive and intelligent use of truncation, synonyms, and proximity is vital. Classification search should be combined with a text search where the relevant subclasses have large numbers of patents and where classification search is most productive. The text search should include only such terms as are necessary to bring the number of patents down to a reasonable number for viewing. Classification search should be combined with text search where the broad concepts/environment are found in particular subclasses and the specific inventive concepts are not easily visually represented. These inventive concepts for example may relate to particular circuitry, laser source, photodetector, and optical component non-visual characteristics, particular storage medium materials, particular terminology.

# FOREIGN PATENT RESOURCES

Search separately from the US Patent Search. These databases consist of abstract documents. Text searching abstracts requires the use of different search logic e.g. the use of broad Boolean and/or operators instead of narrow proximity operators.

# Derwent World Patents Index, Classification and Text Search

<u>EAST</u> Coverage: 1963 - present, Full Text: - N/A <u>WEST</u> Coverage: 1963 - present, Full Text: - N/A

English abstracts database of patent documents from more than 40 patent-issuing authorities.

Used for text and assignee/inventor searching. Queries may include classification parameters when combined with other terms to be searched in the technical content of the application.

# **EPO Abstracts, Text and Classification Search**

EAST Coverage: 1978 - present, Full Text: - N/A WEST Coverage: 1978 - present, Full Text: - N/A

English abstracts database of patents and published applications from EPO, WO/PCT, United Kingdom, France, Germany, and Switzerland. USPC searching is limited to documents added to the database from 1978 to September 30, 1995.

EPO patent documents in a USPC or an IPC classification are viewed for relevance to the patent application being searched. Used for text and assignee/inventor searching.

#### EPO esp@cenet

esp@cenet Coverage: 1920 - present, Full Text: 1920 - present

National patent information from all member states of the EPO as well as bibliographic data from patents worldwide.

Source for translations.

#### FPAS3

Coverage: - , Full Text: -

USPTO foreign document retrieval system.

#### JPO Abstracts, Text and Classification Search

EAST Coverage: 1976 - present, Full Text: - N/A WEST Coverage: 1976 - present, Full Text: - N/A

English abstracts database of Japanese published unexamined applications. USPC searching is limited to documents added to the database from 1978 to September 30, 1995.

JPO patent documents in a USPC or an IPC classification are viewed for relevance to the patent application being searched. Used for text and assignee/inventor searching.

# JPO Industrial Property Digital Library

NCIPI Coverage: 1976 - present, Full Text: 1976 - present

Japanese patent information.

This resource is used as a source for machine translations of Japanese patent documents from 1993 to present.

# NON-PATENT LITERATURE RESOURCES

The resources listed are those that USPTO staff have found consistently yield the most relevant search results. Commercial databases available through a single vendor can generally be searched simultaneously, although it is preferable to search full text and bibliographic databases in separate groupings. In addition to the use of subscription databases and public Internet sites, it is recommended that books, manuals, standards and specifications be considered in the search for prior art. The links in the Resource Description section lead to:

- Database search help sheets for databases requiring training and passwords
- Databases themselves when access is governed by IP address
- Internet sites available to the public (USPTO "Rules of the Road (PDF Doc)")
- Book and journal records via the Scientific and Technical Information Center's (STIC) online catalog

EIC 2600 staff performs NPL searches and helps examiners who need NPL search assistance. For suggestions on additional NPL resources to search, contact EIC2600.

# **ACM Digital Library**

ACM Coverage: Dates - vary, Full Text: Dates - vary

Citations and full text articles from ACM journals, newsletters, and conference proceedings.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

#### **CA SEARCH: Chemical Abstracts**

<u>Dialog</u> Coverage: 1967 - present, Full Text: - N/A <u>Questel Orbit</u> Coverage: 1967 - present, Full Text: - N/A

STN Coverage: 1907 - present, Full Text: - N/A

Database of the worldwide literature of chemistry and its applications. Abstracts available via STN.

This resource provides relevant data if chemical compounds are relevant in disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

## **CMP Computer Fulltext**

Dialog Coverage: 1988 - present, Full Text: 1988 - present

Full text information about the computer, communications, and electronic industries.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, high density data disks (HDD), and product data.

## Ei Compendex

<u>Dialog</u> Coverage: 1970 - present, Full Text: - N/A <u>Questel Orbit</u> Coverage: 1970 - present, Full Text: - N/A

<u>STN</u> Coverage: 1970 - present, Full Text: - N/A

Abstracted information from 4,500 journals plus conference proceedings in engineering and technology.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

## Gale Group New Product Announcements/Plus (NPA/Plus)

Dialog Coverage: 1985 - present, Full Text: 1985 - present

Full text press releases from all industries covering announcements related to products, with a focus on new products and services.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, high density data disks (HDD), and product data.

## **IBM Technical Disclosure Bulletin**

EAST/WEST Coverage: 1958 - 1998, Full Text: -

Defensive disclosure database.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

## **IEEE Xplore**

IEEE Coverage: 1952 - present, Full Text: 1988 - present

Full text access to technical literature in electrical engineering, computer science, and electronics.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

## Inside Conferences

Dialog Coverage: 1993 - present, Full Text: - N/A

Contains details of all papers given at every congress, symposium, conference, exposition, workshop, and meeting received at the British Library Document Supply Centre.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

## Inspec (The Database for Physics, Electronics and Computing)

Dialog Coverage: 1898 - present, Full Text: - N/A

<u>Dialog DataStar</u> Coverage: 1969 - present, Full Text: - N/A

Questel Orbit Coverage: 1969 - present, Full Text: - N/A

STN Coverage: 1969 - present, Full Text: - N/A

Inspec (The Database for Physics, Electronics and Computing) corresponds to the three Science Abstracts print publications: Physics Abstracts, Electrical and Electronics Abstracts, and Computer and Control Abstracts.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

## JICST-EPlus - Japanese Science & Technology

<u>Dialog</u> Coverage: 1985 - present, Full Text: - N/A <u>STN</u> Coverage: 1985 - present, Full Text: - N/A

English citations and abstracts covering the literature published in Japan on all fields of science, technology, and medicine.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

## SciSearch: A Cited Reference Science Database

<u>Dialog</u> Coverage: 1974 - 1989, Full Text: - N/A <u>STN</u> Coverage: 1974 - present, Full Text: - N/A

Cited reference index.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

## Wilson Applied Science & Technology Abstracts

Dialog Coverage: 1983 - present, Full Text: - N/A

Science and technology journal abstracts.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

# INTERNET SEARCH TOOLS

An Internet search should be considered when a search of the other resources listed in this template fail to locate relevant prior art. Consideration must be given to the guidance provided in the Rules of the Road (<u>PDF DOC</u>) for Internet searching for patent applications.

#### Google TM

Google Coverage: - N/A, Full Text: - N/A

Internet search engine.

This resource provides relevant information for the following: tutorials, inventor papers and/or web sites, assignee or company product data or specifications, manuals, standards such as MPEGs, RFC's (Request for Comments), and ISO/IEC, etc. In addition, provides access to resources that can define the meaning of acronyms, or terms of art.

For comments and suggestions, contact Pamela Reynolds at 571-272-3505.

Please obey USPTO "Rules of the Road (PDF Doc)" when using Internet resources.

If you cannot access a file because of a missing or non-working plugin, please contact the Help Desk at 2-9000 for installation assistance.

Intranet Home | Index | Resources | Contacts | Internet | Search | Firewall | Web Services

Last modified 03/27/2006 13:05:29

	Туре	L #	Hits	Search Text	DBs	Time , Stamp	Comment
1	BRS	L1	2	"10814356"	US- PGPUB ; USPAT	2006/03/2 7 12:14	
2	BRS	L2	84925 72	control\$4	US- PGPUB ; USPAT ; USOCR ; EPO; DERWE NT; IBM_T DB	2006/03/2 7 12:14	
3	BRS	1.3	80683 9	interrupt\$4	US- PGPUB; USPAT; USOCR; EPO; DERWE NT; IBM_T DB	2006/03/2 7 12:15	
4	BRS	L4	31120 1	2 same 3	US- PGPUB ; USPAT ; USOCR	2006/03/2 7 12:16	

	Error Definition	Err
1		
2		
3		
4		·

	Туре	L	#	Hits	Search Text	DBs	Time, Stamp	Comment
5	BRS	L5		2070		US- PGPUB ; USPAT ; USOCR ; PO; DERWE NT; IBM_T DB		
6	BRS	L6		216	4 same 5	US- PGPUB ; USPAT ;	2006/03/2 7 12:16	
7	BRS	L7	***************************************	85235	(sync)	US- PGPUB ; USPAT ; USOCR	2006/03/2 7 12:16	

	Error Definition	Err
5	·	
6		
7		

	Туре	L #	Hits	Search Text	DBs	Time, Stamp	Comment
8	BRS	L8	33	6 same 7	EPO; JPO; DERWE NT; IBM_T	2006/03/2 7 12:16	
9	BRS	L9	220	369/47.3	DB US- PGPUB ; USPAT ; USOCR ; EPO; DERWE NT; IBM_T DB	2006/03/2 7 12:17	
10	BRS	L10	185	369/47.31	US- PGPUB ; USPAT ; USOCR	2006/03/2 7 12:17	

	Error Definition	Err
8		
9		
10		

	Туре	L #	Hits	Search Text	DBs	Time, Stamp	Comment
11	BRS	<b>L11</b>	193		US- PGPUB; USPAT; USOCR; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 7 12:17	
12	BRS	L12	113	369/47.34	US- PGPUB ; USPAT :	2006/03/2 7 12:17	·
13	BRS	L13	143	369/30.23	US- PGPUB ; USPAT ; USOCR	2006/03/2 7 12:17	

	Error Definition	Err
11		
	<i>;</i>	
12		
13		

	Туре	L #	Hits	Search Text	DBs	Time, Stamp	Comment
14	BRS	L14	281		US- PGPUB; USPAT; USOCR; EPO; DERWE NT; IBM_T DB	2006/03/2 7 12:18	·
15	BRS	L15	41335	G11B007/00	US- PGPUB ; USPAT ;	2006/03/2 7 12:18	
16	BRS	L16	8204	G11B007/0045	US- PGPUB ; USPAT ; USOCR	2006/03/2 7 12:18	

	Error Definition	Err
14		
15		
16		

PTY

IDENTIFIER:

TITLE:

On-chip storage of secret information as inverse pair

Detail Description Paragraph - DETX (3817):

[4262] In slave mode the state machine proceeds to the SyncWait state when enabled. It waits in this state until a-lsync pulse rise is received from the input deglitch circuit. When a pulse is detected the machine jumps to the SyncPeriod state and begins counting down the LsyncHigh number of clock cycles before returning to the SyncWait state. Note in slave mode the LsyncHigh specifies the minimum number of pclk cycles between Lsync pulses. On transition from the SyncWait to the SyncPeriod state the line st signal to the PHI controller is pulsed to indicate the line start. While in the SyncPeriod state if a lsync pulse fall is detected the state machine will signal a sync error (via sync err) to the PHI controller and cause a buffer underrun interrupt.

Detail Description Table CWU - DETL (110):

108TABLE 89 <u>Interrupt Controller</u> Unit I/O definition Port name Pins I/O Description Clocks and Resets Pclk 1 In System Clock prst n 1 In System reset, synchronous active low CPU interface cpu\_adr[7:2] 6 In CPU address bus. Only 6 bits are required to decode the address space for the ICU block cpu\_dataout

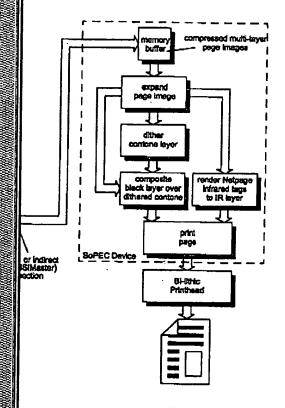
lication (10) Pub. No.: US 2005/0188218 A1 (43) Pub. Date: Aug. 25, 2005

## **Publication Classification**

(51) Int. Cl.7 ... H04L 9/00 (52) U.S. Cl. . .. 713/200

(57) **ABSTRACT** 

An integrated circuit comprising a processor and memory storing: secret information accessible via a first address, the secret information comprising a string of bit values; an inverse-string accessible via a second address, the inversestring comprising a string of bit values, wherein each of the bit values in the inverse-string is the logical inverse of a bit value at a corresponding bit position in the secret information, the integrated circuit being programmed with code configured to: (i) receive a request for the secret information; and (ii) test whether the bit-values of the inverse string are the inverse of the bit-values at respective corresponding bit positions of the secret information.



Operation | Spring | Spring | Spring | KMC

DOCUMENT-IDENTIFIER: US 20050182985 A1

TITLE:

Mechanism for

reducing multi-word

write problems

Detail Description Paragraph - DETX (3872):

[3464] In slave mode the state machine proceeds to the SyncWait state when enabled. It waits in this state until a lsync\_pulse\_rise is received from the input deglitch circuit. When a pulse is detected the machine jumps to the SyncPeriod state and begins counting down the LsyncHigh number of clock cycles before returning to the SyncWait state. Note in slave mode the LsyncHigh specifies the minimum number of pclk cycles between Lsync pulses. On transition from the SyncWait to the SyncPeriod state the line st signal to the PHI controller is pulsed to indicate the line start. While in the SyncPeriod state if a lsync pulse fall is detected the state machine will signal a sync error (via sync err) to the PHI controller and cause a buffer underrun interrupt.

Detail Description Table CWU - DETL (112):

110TABLE 89 Interrupt Controller Unit I/O definition Port name Pins I/O Description Clocks and Resets Pclk 1 In System Clock prst n 1 In System reset, synchronous active low CPU interface cpu adr[7:2] 6 In CPU address bus. Only 6 bits are required to decode the address space for the ICU block cpu dataout US 20050182985A1

lication (10) Pub. No.: US 2005/0182985 A1

(43) Pub. Date:

Aug. 18, 2005

**Publication Classification** 

(51) Int. Cl.7 .... G06F 1/26 (52) U.S. Cl. . 713/340

(57)

hon

53134 53135

**ABSTRACT** 

An integrated circuit comprising a processor, non-volatile memory, an input for receiving power from a power supply and a power detection unit, wherein the integrated circuit is configured to enable multi-word writes to the non-volatile memory, the power detection unit being configured to: monitor a quality of power supplied to the input; and in the event the quality of the power drops below a predetermined threshold, preventing subsequent words in any multi-word write currently being performed from being written to the

DIU CDU Œ 180 **BF**U TE TFU DNC DWU ш

Details Fined Minete Patients KMC

**EAST Browser - L8: (33) 6 same 7 | US 20050177633 A1 |** Tag: S | D... File Fift Mew Icols Window Help US 20050177633 A1 DOCUMENT-IDENTIFIER: Timeslot TITLE: arbitration scheme lication (10) Pub. No.: US 2005/0177633 A1 (43) Pub. Date: Aug. 11, 2005 (52) U.S. Cl. 709/225 Detail Description Paragraph - DETX (3803):ABSTRACT

> 53134 53135

15/173

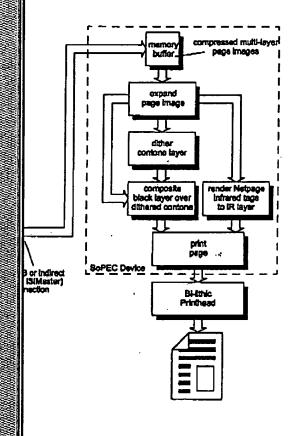
[4262] In slave mode the state machine proceeds to the SyncWait state when enabled. It waits in this state until a-lsync pulse rise is received from the input deglitch circuit. When a pulse is detected the machine jumps to the SyncPeriod state and begins counting down the LsyncHigh number of clock cycles before returning to the SyncWait state. Note in slave mode the LsyncHigh specifies the minimum number of pclk cycles between Lsync pulses. On transition from the SyncWait to the SyncPeriod state the line st signal to the PHI controller is pulsed to indicate the line start. While in the SyncPeriod state if a lsync pulse fall is detected the state machine will signal a sync error (via sync err) to the PHI controller and cause a buffer underrun\_interrupt.

Detail Description Table CWU - DETL (109):

Unit I/O definition Port name Pins I/O Description Clocks and Resets Pclk 1 In System Clock prst\_n 1 In System reset, synchronous active low CPU interface cpu\_adr[7:2] 6 In CPU address bus. Only 6 bits are required to decode the address space for the ICU block cpu\_dataout [31:0] 32 In Shared write data bus

Amethod for arbitrating between a plurality of access requests issued in relation to a resource by a plurality of requestors, wherein each request can be one of at least two types, a first of the types having a higher latency associated with its performance than at least some of the other types, the method including the steps of (a) receiving a plurality of the access requests; (the requests are not placed anywhere, they are simply received); (b) maintaining a current pointer that points to a current timeslot in a timeslot list, and at least

one lookahead pointer that points to a future timeslot in the timeslot list; and (c) in the event an access request as arbitrated via the lookahead pointer is of the first type, initiating performance of the access request earlier than the position in the list suggests it would be performed should it be started when the current pointer reached the timeslot.



Operated the rest of the second secon

 $\mathbf{\nabla}$ 

	Туре	L #	Hits	Search Text	DBs	Time, Stamp	Comment
1	BRS	L1	5		US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 7 12:51	
2	BRS	L2	160	710/59	US- PGPUB ; USPAT ;	2006/03/2 7 12:51	
3	BRS	L3	25008	G06F003/06	EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 7 12:51	
4	BRS	L4	42	369/47.33		2006/03/2 7 12:51	
5	BRS	L5	9	369/47.34		2006/03/2 7 12:52	
6	BRS	<b>г</b> е	0	369/53.11	US- PGPUB	2006/03/2 7 12:52	

			· · ·	<del></del>		1 ( ( 1	
L		1 _	1_		US-	2006/03/2	
7	BRS	ഥ7	2	710/59	POPLID	7 10 50	
i		i	1		PGPUB	7 12:52	

		<b>D</b>
	Error Definition	Err
1		
2		
3		
4		_
5		
6		
7		